

WHAT IS CLAIMED IS:

1. A method comprising:
inquiring, from a remote location, a status of an upper-layer communication indicator;
entering the status into data storage;
performing a first set of actions when the status indicates valid upper-layer communication; and
performing a second set of actions when the status indicates invalid upper-layer communication.
2. The method, as recited in Claim 1, wherein the inquiring comprises:
a service technician requesting an end-user to provide the status of a light emitting diode (LED) on a Digital Subscriber Loop (DSL) transceiver.
3. The method, as recited in Claim 1, wherein the upper-layer communication indicator indicates a Point to Point Protocol Over Ethernet (PPPoE) authentication status.
4. The method, as recited in Claim 1, wherein the upper-layer communication indicator indicates a layer 3 or above communication status.
5. The method, as recited in Claim 1, wherein entering the status into data storage comprises a service technician entering data into an electronic job ticket.
6. The method, as recited in Claim 1, wherein performing the second set of actions comprises a service technician advising an end-user to perform a corrective action to a local configuration.
7. The method, as recited in Claim 1, wherein performing the second set of actions comprises a service technician performing a corrective action at the remote location.

8. The method, as recited in Claim 1, wherein performing the first set of actions comprises sending a service technician to an end-user location to perform a set of troubleshooting actions.

9. A transceiver comprising:

a connection port configured to communicate data signals from a computer to a service provider device; and

a first status indicator configured to indicate at least a layer 3 or above communication status between the computer and the service provider device.

10. The transceiver, as recited in Claim 9, wherein the first status indicator indicates a Point to Point Protocol Over Ethernet (PPPoE) authentication status.

11. The transceiver, as recited in Claim 9, wherein the service provider device is a Digital Subscriber Loop Access Multiplexer (DSLAM).

12. The transceiver, as recited in Claim 9, further comprising:

a second status indicator configured to indicate a layer 2 connection status between the computer and the service provider device.

13. The transceiver, as recited in Claim 12, wherein the second status indicator is a wide area network status indicator.

14. The transceiver, as recited in Claim 9, further comprising:

a second status indicator configured to indicate a layer 1 status of the transceiver.

15. The transceiver, as recited in Claim 14, wherein the second status indicator is a power status indicator.

16. A method of digital subscriber line service maintenance, the method comprising:

- detecting a digital subscriber line (DSL) related troubleshooting event at a remote service terminal that supports an end-user computer having a DSL connection;
- inquiring, from the remote service terminal, a status of a visual upper-layer communication indicator associated with a digital subscriber line (DSL) line terminating at the DSL connection of the end-user computer;
- entering the status of the visual upper-layer communication indicator into data storage coupled to the service terminal in connection with the DSL related troubleshooting event;
- performing a first set of maintenance actions when the status indicates valid upper-layer communication; and
- performing a second set of maintenance actions when the status indicates invalid upper-layer communication.

17. The method, as recited in Claim 1, wherein the upper-layer communication indicator is a Point to Point Protocol Over Ethernet (PPPoE) authentication status indicator.

18. The method, as recited in Claim 1, wherein the upper-layer communication indicator indicates a layer 3 or above communication status, wherein layer 3 is defined by the seven layer OSI model.

19. The method, as recited in Claim 1, wherein performing the first set of actions, but not the second set of actions, comprises sending a service technician to the end-user location to perform a set of troubleshooting actions on the end-user computer.